## WHAT IS CLAIMED IS:

5

25

1. A magnetic head comprising:

a first core having a thin film magnetic head; and a second core bonded to the first core from a surface whereon the thin film magnetic head is formed,

a magnetic gap of the thin film magnetic head being exposed on a medium opposing surface of the first core and the second core,

wherein a bonding surface of at least one of the first core and the second core is provided with at least one abutting plane that juts out toward the other bonding surface and a groove formed to have a predetermined depth with a step provided between itself and the abutting plane,

the abutting plane and the bonding surface of the other core are butted against each other,

an adhesion layer of a predetermined thickness is provided at least between the groove and the bonding surface of the other core, and

the first core and the second core are bonded.

- 2. The magnetic head according to Claim 1, wherein the abutting plane is formed such that it includes the region formed on the first core wherein the thin film magnetic head is formed.
- 3. The magnetic head according to Claim 1, wherein the thickness of the adhesion layer ranges from 0.05  $\mu m$  to 0.3  $\mu m$ .

4. The magnetic head according to Claim 1, wherein the thin film magnetic head is constructed to have an MR thin film magnetic head.

5

5. The magnetic head according to Claim 1, wherein the thin film magnetic head and the first core are covered with a protective film made of an insulating material, and the front surface of the protective film provides the bonding surface.

10

- 6. The magnetic head according to Claim 1, wherein the adhesion layer is formed of an epoxy-based adhesive agent or a low-melting, glass-based adhesive agent.
- 7. A manufacturing method for a magnetic head comprising the steps of:
  - (a) forming a plurality of thin film magnetic heads on a first substrate, then cutting the first substrate into a bar with a plurality of thin film magnetic heads aligned thereon in the longitudinal direction to form a first bar;
  - (b) cutting a second substrate into a bar to form a second bar;
  - (c) defining the surface of the first bar whereon the thin film magnetic heads are formed as the surface to be bonded to the second bar, protuberantly forming at least one or more abutting planes on the boding surface of at least one of the first bar or the second bar at positions where they will remain in cores when the bars are cut into individual

cores in a subsequent step, and forming a groove with a predetermined depth with a step provided between itself and the abutting plane,

- (d) abutting the abutting plane formed on at least one
  5 bar against the bonding surface of the other bar, setting the bars in parallel to each other, and forming an adhesion layer of a predetermined thickness between the groove formed in at least one bar and the bonding surface of the other bar to bond the first bar and the second bar; and
- 10 (e) cutting the first bar and the second bar into cores at between the individual thin film magnetic heads to produce a magnetic head having the first core and the second core bonded through the intermediary of the adhesion layer and a magnetic gap of the thin film magnetic head being exposed on the medium opposing surface of the first core and the second core.
- 8. The manufacturing method for a magnetic head according to Claim 7, wherein in the step (c), the abutting plane is formed such that it includes the region wherein the thin film magnetic heads of the first bar are formed.
  - 9. The manufacturing method for a magnetic head according to Claim 8, wherein in the step (c), the abutting plane is formed in each region wherein the thin film magnetic heads are formed, and the groove formed between the abutting planes is exposed up to the front end surface of the first bar that will provide a medium opposing surface.

- 10. The manufacturing method for a magnetic head according to Claim 7, wherein in the step (c), the abutting planes are formed in the region between the thin film 5 magnetic heads arranged in the longitudinal direction of the first bar.
- 11. The manufacturing method for a magnetic head according to Claim 10, wherein the abutting planes formed between the thin film magnetic heads are dummy pads located on cutting lines for cutting the first bar and the second bar into cores in the step (e), and all or some of the dummy pads are removed by the cutting.
- 15 12. The manufacturing method for a magnetic head according to Claim 7, wherein the groove is formed to a depth ranging from 0.05  $\mu m$  to 0.3  $\mu m$  in the step (c) to form the adhesion layer to a thickness ranging from 0.05  $\mu m$  to 0.3  $\mu m$  in the step (d).

20

13. The manufacturing method for a magnetic head according to Claim 7, wherein an epoxy-based adhesive agent or a low-melting, glass-based adhesive agent is selected as an adhesive agent in the step (d).